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# Panama

*Panama is important to world energy markets because the Panama Canal is a major transit center for oil shipments and a potential **choke point**.*

*Note: Information contained in this report is the best available as of November 2004 and is subject to change.*



## BACKGROUND

Despite its small population and area (3.2 million and 30,193 square miles, respectively), Panama is an important center for international trade in the Western Hemisphere, as both a major shipping thoroughfare and a regional economic power. Since 1992,

an average of 185 million long tons of cargo has passed annually through the Panama Canal. Panama is also a financial and communications hub that sits at the crossroads of five international fiber-optic networks and hosts 110 international banks.

The Panamanian economy is one of Latin America's most stable, with the Panamanian Balboa being pegged to the dollar since 1903. Panama's Colon Free Trade Zone (CFZ), established in 1953, is the largest in the Western Hemisphere and contributes substantially to the country's economy. The CFZ allows all goods, except firearms and petroleum products, to be imported, stored, modified, repacked, and re-exported without being subject to any customs regulations. Although the country has consistently maintained one of Central America's highest per capita gross domestic products, there is a high level of income inequality, with a significant portion of the population living below the poverty line.

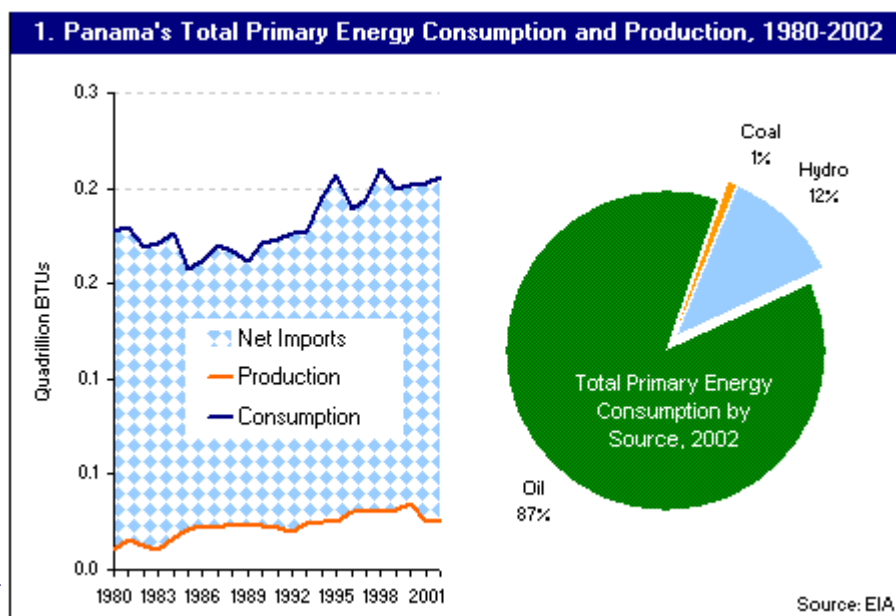
Panama's reliance on the Panama Canal, shipping and port services not only makes Panama's economy highly dependent on world trade and economic trends. The global downturn in 2001 and in 2002 slowed the growth rate of the country's economy considerably, which had enjoyed an annual average real domestic product growth (GDP) of 5.1% through the 1990s. In 2002, canal transits and tonnage, for example, declined 2.3% and 2.8% respectively, over 2001. Activity at the Colon Free Trade Zone decreased, along with export tonnage of some Panama's major export commodities, for

example, bananas (-5.2%) and shrimp (-16.5%). Overall, Panama's real GDP growth rate slowed from 2.7% in 2000 to only 0.6% in 2001. In 2002, the economy began to recover slightly, with a growth rate of 2.2%. In 2003, a stronger global economy helped Panama post a growth rate of 4.1%, the highest since 1998. In the first half of 2004, Panama's economy has remained robust, boosted by increased canal traffic, tourism spending and investment, and Colon free-trade zone activity.

On May 2, 2004, Martin Torrijos, son of the late former president Omar Torrijos, was elected president of Panama. President Torrijos was sworn in on September 1, 2004.

## ENERGY OVERVIEW

Panama is the largest energy consumer in Central America. With no proven oil, natural gas or coal reserves, the country is required to import all of its hydrocarbon needs. In 2002, net energy imports met 88% of Panama's total primary energy consumption (see Figure 1). Hydro and other renewables (less than 1%) accounted for the remainder of the country's energy consumption. The country's energy mix, however, could become more diversified if the Panamanian government can finalize a natural gas import agreement with neighboring Colombia.



Overall, Panama's main importance in the world global energy market is as a transit zone for crude oil and petroleum products via the Panama Canal and the newly reopened Trans-Panamanian pipeline.

## OIL

In 2002, oil accounted for 87% of Panama's total primary energy consumption, down slightly from previous years when it accounted for over 90%. This high dependence on imported oil exposes the country to global price fluctuations and has at times impacted the country's economy. Overall, oil consumption in Panama has remained relatively flat, growing an estimated 1.2% year-on-year in 2003, to 83,000 barrels per day (bbl/d). Although Panama lacks reserves to produce oil, it still plays a significant role in the global oil market, with the Panama Canal and its Petroleum Export Zone (more information below).

## The Panama Canal

The Panama Canal extends approximately 50 miles from Panama City on the Pacific Ocean to Colón on the Caribbean Sea. The Canal is widely considered to be one of the world's great engineering achievements. The United States is the largest user of the Canal in terms of cargo tonnage, as either port of origin or destination, although Asian countries are beginning to close the gap. Ships bound for Japan from the East Coast of the United States save about 3,000 miles by going through the Canal; ships sailing from Ecuador to Europe save about 5,000 miles.

### ***Treaties***

In 1903, the Republic of Panama and the United States signed the original Panama Canal Treaty, which allowed the United States to build and operate a canal connecting the Pacific Ocean with the Caribbean Sea through the Isthmus of Panama. The Treaty granted the United States the use, occupation, and control of a Canal Zone, approximately 10 miles wide, in which the United States possessed full sovereign rights. In return, the United States guaranteed the independence of Panama and paid the government of Panama \$10 million, as well as an annuity of \$250,000, which each year increased at a rate far beyond that of inflation.

On September 7, 1977, a new Panama Canal Treaty was signed by President Torrijos of Panama and President Carter of the United States, which transferred full control of the Canal to Panama on December 31, 1999. Under this Treaty, the Panama Canal Company, the Canal Zone, and its government were disenfranchised on October 1, 1979, and replaced by the Panama Canal Commission that operated the Canal during the 20-year transition period that began with the Treaty. The Panama Canal Commission has now been replaced by a new Panamanian entity, the Panama Canal Authority. The treaty guarantees permanent neutrality of the Canal. Control over U.S. military facilities in the former Panama Canal Zone has reverted to Panamanian authority. The U.S. Southern Command and U.S. Army South troops moved out of Panama at the end of 1999. The Panama Ports Company, a subsidiary of Hong Kong-based Hutchison-Whampoa, now operates the ports at both entrances, Cristobal (Atlantic) and Balboa (Pacific) on to the Canal. This has been a cause for security concerns among some lawmakers in the United States, although the United States is legally entitled to intervene to maintain the neutrality of the Canal.

### ***Canal Traffic***

The U.S. East Coast-Asia route is the dominant trade route for the Panama Canal, and is boosted by increasing U.S.-China trade. Movement between U.S. East Coast and West Coast South America and between Europe and Asia are also major trade routes. Recently, North-South trade has been increasing, as Latin America evolves into an increasingly important trading partner of North America. The Canal is designed to accommodate about 50 ships per day (the maximum has been 65 transits per day). On average, it takes one ship 24 hours to pass completely through the canal. Oceangoing vessel transits totaled 11,725 in fiscal year 2003, or an average of 32 vessels per day, a 1.1% decline from 2001's total of 11,862. Overall, there were 13,154 transits in 2003 (includes small commercial vessels).

Petroleum is one of the larger commodities (by tonnage) shipped through the Canal, accounting for about 11% of total canal shipments in 2003. But oil's share of total tonnage transited has been decreasing, from 14% in 2002 and 16% in 2001. In 2003, an estimated 444,000 bbl/d of crude oil and petroleum products passed through the Panama Canal, with around 65% of total oil shipments moving south from the Atlantic to the Pacific. Overall, petroleum products far outweighed crude oil, accounting for an estimated 78% of all oil-related shipments through the Canal in 2003.

Panama's government is currently considering an \$8 billion expansion of the canal in order to allow bigger ships to cross to and from the Atlantic and Pacific oceans. Failing to modernize the canal could lead to its decline as a key trading passage.

### ***U.S. Petroleum Imports and the Panama Canal***

The United States is not heavily reliant on the Panama Canal for its petroleum imports (crude oil plus petroleum products). In 2003, less than 1% of total gross U.S. crude oil imports and 3.5% of gross U.S. imported petroleum products passed through the Panama Canal. Overall, only 1.0% of total gross U.S. petroleum imports transited the Canal en route to American ports in 2003.

### **Trans-Panama Pipeline**

In November 2003, Petroterminal de Panama, the owner of the Trans-Panama pipeline, reactivated the line, which had been out of operation since 1996. The company signed a contract with Taurus Petroleum Limited to transport up to 100,000 bbl/d of Ecuadorian crude from the Pacific to a Caribbean port for distribution to refineries in the region. The pipeline was originally constructed to facilitate the transportation of Alaskan North Slope Crude oil (ANSCO) from Valdez, Alaska to refineries on the Gulf coast of the United States, as the very large crude carriers (VLCCs) which transported Alaskan crude could not transit the Panama Canal. From 1982 to 1996, the pipeline transported an estimated 2.5 billion barrels of oil.

### **Petroleum Export Zones (PEZ)**

In 1992, the Panamanian government created the Petroleum Export Zones (Zonas Libres de Petróleo), which allow any foreign or national company to establish operation in a PEZ to produce, refine and export petroleum products. Companies are also allowed to sell directly to foreign vessels transiting the Panama Canal, and to foreign airlines. The marine fuel industry (bunkering) plays a crucial role in Panama's economy. In 2001, for example, about 52,000 bbl/d of residual bunker fuel was consumed. With nearly 12,000 ships transiting the Canal every year, the industry continues to attract new suppliers to gain market share. Such recent entrants include Peninsula Petroleum, Chemoil, and PDVSA's bunkering arm Deltaven.

PEZs are also exempt from municipal and federal taxes, as well as from government regulations affecting the local market. There are currently eight PEZs in Panama, with total storage capacity of 16.7 million barrels. These included the international airport, plus seven maritime ports with fuel handling facilities: Balboa, Roadman, Cristobal, Charco Azul, Chiriqui Grande, Bahia Las Minas and Isla Taboguilla. The last port was opened in February 2003. The \$28 million oil terminal is owned by the Spanish-Italian company, Decal.

### **ELECTRICITY**

In 2002, Panama generated an estimated 4.9 billion kilowatthours (Bkwh) of electricity, of which 50.1% was generated from hydro, 49.5% from thermal sources and 0.4% from other renewables. Panama generates more than it consumes (4.5 Bkwh in 2002), exporting its electricity to neighboring countries, mainly to Costa Rica.

According to a 2000 census report, 81% of the country's population had access to electricity. Panama's government hopes to increase electricity coverage to 95% in the next 10-12 years. The government is also considering using solar energy to provide electricity in remote areas.

### **Sector Organization**

In 1998, the Panamanian government restructured its electricity sector, separating generation, distribution, and transmission assets of state-owned power company, Instituto de Recursos Hidraulicos y Electrificación (IRHE). The government partially privatized four power plants belonging to IRHE: the 300-MW EGE Fortuna (El Paso Energy 25% stake and Hydro Québec 16.3% stake); the 90-MW EGE Chiriqui (AES 49% stake); the 150-MW EGE Bayano (AES 49% stake); and the 285-MW Bahia Las Minas (Enron 51% stake, now managed by PrismaEnergy). The Panamanian government retained the remaining shares in the companies, with employees allowed to acquire up to 2%. Union Fenosa acquired stakes in two of IRHE's three distributors: Empresa de Distribución Eléctrica Metro Oeste (Edemet); and Empresa de Distribución Eléctrica Chiriquí (Edechi). Union Fenosa also acquired their limited combined generation capacity of 26 MW. U.S.-based Constellation Energy acquired the third distribution unit, Elektra Noreste. The government retained control of Panama's transmission company - Empresa de Transmisión Eléctrica (ETESA). A regulatory body, Ente Regulador, was also created to oversee the electric, telecommunications,

and water sectors.

### Regional Integration

Panama is part of the wider Central America plan to link the region's electricity grids, the so-called The Sistema de Interconexion Electrica para America Central (SIEPAC) project. SIEPAC calls for the construction of transmission lines connecting 37 million consumers in Panama, Costa Rica, Honduras, Nicaragua, El Salvador, and Guatemala by 2006. SIEPAC is designed to mitigate the poor quality of existing interconnections, making regional transactions possible.

Besides SIEPAC, a transmission project that would link Panama to Colombia is still under consideration. In August 2004, a commission in charge for determining the best routes to interconnect the countries completed its environmental impact study. The governments now have to decide whether the transmission line will stretch over land or follow a route across the Gulf of Uraba.

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## COUNTRY OVERVIEW

**President:** Martin Torrijos Espino (since September 2004)

**Independence:** 1903 (from Colombia)

**Population (2004E):** 3.2 million

**Location/Size:** Middle America, bordering both the Caribbean Sea and the North Pacific Ocean, between Colombia and Costa Rica/30,200 square miles

**Capital City:** Panama City

**Languages:** Spanish (official), English (14%; many Panamanians are bilingual)

**Ethnic Groups:** Mestizo (mixed Amerindian and white) 70%, Amerindian and mixed (West Indian) 14%, White 10%, Amerindian 6%

**Religions:** Roman Catholic 85%, Protestant 15%

## ECONOMIC OVERVIEW

**Minister of Economy and Finance:** Ricaurte Vasquez

**Currency:** Balboa

**Market Exchange Rate:** US \$1=1 Balboa (fixed)

**Nominal Gross Domestic Product (GDP, 2003E):** \$12.9 billion

**Real GDP Growth Rate (2003E):** 4.1% **(2004F):** 4.7% **(2005E):** 4.0%

**Inflation Rate (consumer prices, 2003E):** 1.4% **(2004F):** 2.3% **(2005F):** 1.8%

**Unemployment Rate (2003E):** 13.8%

**Merchandise Exports (2003E):** \$808 million

**Major Export Products (2002E):** bananas, shrimp, melons, sugar

**Major Destinations of Exports (2002E):** United States (47.8%), Costa Rica (7.4%), Honduras (1.3%)

**Merchandise Imports (2003E):** \$3.1 billion

**Major Import Products (2002E):** capital goods, food products, oil

**Main Origins of Imports (2002E):** Colombia (34.3%), United States (5.4%), Japan (1.3%)

**Merchandise Trade Deficit (2003E):** \$2.3 billion

**Current Account Balance (2003E):** -\$408 million

**Foreign Debt (2003E):** \$8.6 billion

## ENERGY OVERVIEW

**Oil Production (2003E):** None

**Oil Consumption (2003E):** 83,000 bbl/d

**Crude Refining Capacity (1/1/04):** None

**Coal Consumption (2002E):** 70,000 short tons (all imported)  
**Electric Generation Capacity (2002E):** 1.26 gigawatts (48% hydroelectric and 52% thermal))  
**Electricity Generation (2002E):** 4.9 billion kilowatthours (Bkwh)  
**Electricity Consumption (2002E):** 4.5 Bkwh

## ENVIRONMENTAL OVERVIEW

**Total Energy Consumption (2002E):** 0.21 quadrillion Btu\* (<0.1% of world total energy consumption)

**Energy-Related Carbon Dioxide Emissions (2002E; includes natural gas flaring):** 13.6 million metric tons (<0.1% of world total carbon dioxide emissions)

**Per Capita Energy Consumption (2002E):** 48.4 million Btu (vs U.S. value of 339.1 million Btu)

**Per Capita Carbon Dioxide Emissions (2002E):** 0.8 metric tons (vs U.S. value of 20.0 metric tons)

**Energy Intensity (2002E):** 12,750 Btu/\$1995 (vs U.S. value of 10,619 Btu/\$1995)\*\*

**Carbon Dioxide Intensity (2002E):** 0.83 metric tons of carbon dioxide/thousand \$1995 (vs U.S. value of 0.63 metric tons/thousand \$1995)\*\*

**Fuel Share of Energy Consumption (2002E):** Oil (87%), Hydro (12%), Coal (1.0%), Other Renewables (0.1%), Net Imports (-0.1%)

**Fuel Share of Carbon Dioxide Emissions (2002E):** Oil (99%), Coal (1%)

**Status in Climate Change Negotiations:** Non-Annex I country under the United Nations Framework Convention on Climate Change (ratified on May 23rd, 1995). Ratified the Kyoto Protocol on March 5th, 1999.

**Major Environmental Issues:** water pollution from agricultural runoff threatens fishery resources; deforestation of tropical rain forest; land degradation.

**Major International Environmental Agreements:** Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Marine Dumping, Nuclear Test Ban, Ozone Layer Protection, Ship Pollution, Tropical Timber 83, Tropical Timber 94, Wetlands, Whaling.

\* The total energy consumption statistic includes petroleum, dry natural gas, coal, net hydro, nuclear, geothermal, solar and wind electric power. Sectoral shares of energy consumption and carbon emissions are based on IEA data.

\*\*GDP figures are based on OECD figures using purchasing power parity (PPP) exchange rates.

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*Sources for this report include: AES Panamá; CIA World Factbook ; Contraloría General de la República Panamá; Dow Jones News wire service; Empresa de Transmisión Eléctrica; Global Insight; Economist Intelligence Unit ViewsWire; Financial Times; Oil Daily; Oil and Gas Journal; Panama Canal Authority; Panama Ministry of Economy and Finance; Petroterminal de Panamá; U.S. Energy Information Administration; Washington Times;*

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## LINKS

For more information on Panama, see these other sources on the EIA web site:

[EIA Country Information - Panama](#)  
[EIA Regional Indicators- Central America](#)  
[World Oil transit "Choke Points"](#)

Links to other U.S. Government sites:

[CIA World Factbook - Panama](#)

[U.S. Library of Congress Country Study Handbook - Panama](#)  
[U.S. State Department Background Notes on Panama](#)

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## **ELECTRICITY**

[AES Panamá \(Bayano, La Estrella, Los Valles\)](#)  
[Empresa de Generación Eléctrica Bahía Las Minas](#)  
[Empresa de Transmisión Eléctrica, S.A.\(National Transmission Company\)](#)  
[Union Fenosa \(Edemet and Edechi\) \(Distributors\)](#)

## **GOVERNMENT**

[Banco Nacional de Panamá \(Central Bank\)](#)  
[Contraloría General de la República Panamá \(Statistical Office\)](#)  
[Ente Regulador de los Servicios Públicos \(Regulatory Agency for Public Services\)](#)  
[Ministry of Economy and Finance](#)

## **PANAMA CANAL**

[Panama Canal Authority](#)  
[Panama - Directorate General of Consular and Maritime Affairs](#)  
[Petroterminal de Panamá, S.A.](#)

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